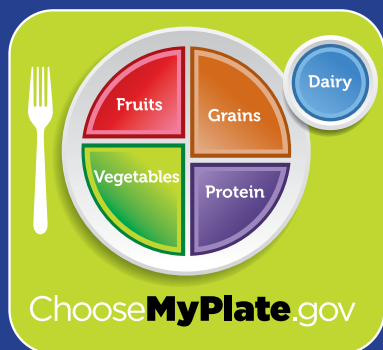




United States Department of Agriculture



Curriculum Training for Teachers





United States Department of Agriculture

Food and Nutrition Service • FNS-476

May 2014

The U.S. Department of Agriculture prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal and, where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or if all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form.

Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax at (202) 690-7442 or email at program_intake@usda.gov.

Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an Equal Employment Opportunity or program complaint, please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish).

Persons with disabilities who wish to file a program complaint, please see information above on how to contact us by mail directly or by email. If you require alternative means of communication for program information (e.g., Braille, large print, audiotape), please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

USDA is an equal opportunity provider and employer.



Curriculum Training for Teachers

Table of Contents

Introduction

About Team Nutrition.....	1
About the Discover MyPlate Training Guide	2

Teacher Training [Use with Customizable Slide Presentation]

1. Welcome	8
2. Childhood Obesity	8
What Do You Notice?	
Benefits Now and Later	
School Meals Are Healthier	
The Importance of Breakfast	
Self-Reflection	
3. Getting Healthy with MyPlate	11
Meet MyPlate	
The Five Food Groups	
“Anytime” Foods	
Getting Enough Daily Physical Activity	
4. Taking a Closer Look at Discover MyPlate	14
Team Up With School Nutrition Services	
Discover MyPlate Kit	
Discover MyPlate Kit Components	
5. How to Fit Discover MyPlate into Your Curriculum	22
Education Standards	
Pacing Recommendations	
Additional Tips to Extend Learning	
School Wellness Connection	



Table of Contents (continued)

6. Best Practices 24

In the Classroom

- Think Healthy in the Classroom
- Celebrate Healthy
- Show Healthy
- Model Healthy

In the Cafeteria

- Connect to the Cafeteria in Every Lesson

Beyond the School

- Engage the Community

At Home

- Engage Parents

Food Preparation

- Make. Learn. Taste.
- Food Club Tips

Food Safety

- Food Allergies
- Know the Symptoms
- Safe Practices

7. Frequently Asked Questions 30

8. Suggested Post-Training Activities 34

Appendix

Reproducible Handouts:

Health Self-Assessment (template) A1

The Five Food Groups B1

Discover *MyPlate* in a Year C1

LEGEND: ICONS USED THROUGHOUT TRAINING GUIDE



Link to a
Web site
for more
resources



Hands-on
activity



Optional
activity



Corresponding
slide in
PowerPoint
presentation



Reproducible
handouts



Introduction

About Team Nutrition




What is Team Nutrition?

Team Nutrition is an initiative of the U.S. Department of Agriculture's (USDA) Food and Nutrition Service to support the Federal Child Nutrition programs through training and technical assistance for school nutrition professionals, nutrition education for children and their caregivers, and school and community support for healthy eating and physical activity. Team Nutrition aims to improve children's lifelong eating and physical activity habits using the principles of the ***Dietary Guidelines for Americans*** and ***MyPlate***. Schools across the Nation have shown their support of this goal by signing up to be "Team Nutrition Schools."

Why should my school become a Team Nutrition school?


By joining the team, your school can:

- Affirm its commitment to helping students make healthier food choices and be more physically active.
- Collaborate with other Team Nutrition Schools.
- Learn about new nutrition education and training materials developed under the Team Nutrition initiative.
- Apply for a ***HealthierUS School Challenge*** certification to earn national recognition for your school
(visit <http://www.fns.usda.gov/hussc/healthierus-school-challenge> for more information).

 There is no cost to becoming a Team Nutrition school and signing up is easy. Learn more by visiting: <http://teamnutrition.usda.gov>

What kinds of materials are available through Team Nutrition?

Team Nutrition provides printed curricula, posters, parent handouts, and other resources free of charge to schools that participate in USDA's Child Nutrition programs, such as the National School Lunch Program. In addition, materials may be downloaded from the Team Nutrition Web site <http://teamnutrition.usda.gov>.


 Complete the order form to request print materials at: <http://tn.ntis.gov>

What types of Team Nutrition grants are available?

States may apply for Team Nutrition Training Grants to support implementation of teacher training and the ***Discover MyPlate*** curriculum. These 2-year grants provide nutrition education, training, technical assistance,



and resources to State agencies administering USDA's Child Nutrition programs. States have used funds to provide hands-on training to school nutrition professionals on the preparation, presentation, and marketing of healthy meals; educating children on the importance of making healthy choices at mealtime, both in the cafeteria and in the classroom; development of cycle menus that meet meal pattern requirements for schools; and many other initiatives.

 Find more information about Team Nutrition Training Grants at: <http://www.fns.usda.gov/tn/team-nutrition-training-grants>

About the *Discover MyPlate* Training Guide

What is the purpose of this training guide?

This training guide has been developed to:

- Support the integration and teaching of Team Nutrition's **Discover MyPlate** curriculum in schools across the United States.
- Boost teacher confidence in teaching nutrition concepts and conducting food preparation activities.
- Show how to collaborate with school nutrition professionals (i.e., school food service) and other parts of the school to support and reinforce classroom lessons.
- Review nutrition basics to familiarize teachers with subject-matter content.

Who should use this training guide?

This guide was developed for use by State agencies, Local Educational Agencies, and nutrition educators. The accompanying PowerPoint presentation can be used as a professional development workshop and as a training resource for:

- Curriculum Coordinators
- Teacher Training Facilitators or Professional Development Coaches
- Nutrition Education Specialists


This training guide could also be adapted for training after-school care providers, community groups, and others interested in using the **Discover MyPlate** curriculum. It can also be used to orient other school staff to the curriculum, such as school nutrition professionals, school nurses, and physical education and health teachers. Their inclusion in training activities can build internal support and help with implementation of learning activities outside of the classroom.

Goals for nutrition education and promotion are some of the required elements of a local school wellness policy, as is a collaborative team approach to enhancing the school nutrition environment. It may be prudent for those implementing Team Nutrition's **Discover MyPlate**


curriculum to find and read their school district's Local School Wellness Policy and any guidelines that exist for their school. Refer to the **Post-Training Activity** on p. 35 of this training guide for an activity to support local school wellness policies.

Additional Supplies Needed

In addition to this training guide and the accompanying PowerPoint presentation, you will need:

- ☐ At least one* copy of the **Discover MyPlate** kit, including all of the components: Teacher's Guide, Student Workbooks, Poster, 40 Food Cards, 6 different Emergent Reader mini books (for students), Emergent Readers: Teacher's Edition, CD of the *Reach for the Sky* Song, 5 different Parent Handouts (*Welcome to School Lunch!*; *Meet MyPlate*; *Snack Time!*; *Be Your Best With Breakfast*; *Move, Play, Have Fun!*), 4 Look and Cook Recipes (*Friendship Pocket*, *Crunchy Rainbow Wrap*, *Fruit-a-licious Breakfast Cup*, *Food Group Friend*), and 6 Food Group Friends Profile Cards.
 - * **NOTE: It is recommended that multiple kits be provided in trainings for hands-on exploration. If providing one kit per participant is not possible, provide one kit per group of 4-6 participants. Use one kit for demonstration and as a display.**
- ☐ A Health Self-Assessment questionnaire, created by using the template on **pp. A1-A2**. Make enough copies for each participant.
- ☐ Copies of reproducible handouts (**pp. B1-C1 of the Appendix**) for each participant (noted by the  icon)
- ☐ Whiteboard or chart paper with markers
- ☐ Sticky notes or index cards
- ☐ A projector and screen
- ☐ A computer/laptop
- ☐ Speakers or CD player to play song
- ☐ For curriculum planning activities:
 - Copies of national and State education standards
 - District-specific curriculum maps
- ☐ For food preparation activities:
 - Ingredients and supplies needed for one or all of the **Look and Cook Recipes** selected to implement
 - Access to hand-washing sink, hand soap, paper towels
 - Access to drinking water
 - Optional: plastic gloves
- ☐ Pens and paper for writing

How to use this training guide

Use this training guide and the accompanying PowerPoint presentation to plan a training session that fits your needs. This guide includes training notes, discussion points, and information about hands-on activities for training participants (noted with the  icon). The customizable PowerPoint presentation includes 62 slides that you can supplement with information specific to your own State, school district, or community.

Trainings can be done for groups as small as 5 participants and as large as 80. For large groups, it is recommended that there be more



than one training facilitator. Provide at least one complete **Discover MyPlate** kit per 4-6 participants.

For maximum efficiency, the room for training should include enough tables to seat participants in groups of 4-6 with a clear view of the whiteboard/flip chart and projector screen. Additional tables for food preparation activities are recommended.

Timing

The training can be completed in two 45-minute sessions. To save time in large groups, discussion activities can be skipped. If more time is available or, if you're working with a small group of trainees, additional training activities have been provided. Each activity includes a suggested amount of time spent. These are noted with an ⌚ icon and are labeled as "optional." The sample training timing charts (Tables I-III) below can be used as a guide to help you customize a training session that best suits you and your trainees.

TABLE I. BRIEF OVERVIEW TRAINING ITINERARY (90 MINUTES)

Training Guide Section	Time Required (does not include optional activities)
SESSION 1 (45 minutes) POWERPOINT SLIDES 1-32	
Welcome Childhood Obesity	10 minutes
Getting Healthy With MyPlate Reproducible Handouts: – Health Self-Assessment – The Five Food Groups	10 minutes
Taking A Closer Look At Discover MyPlate	25 minutes
[BREAK]	
SESSION 2 (45 minutes) POWERPOINT SLIDES 33-61	
How To Fit Discover MyPlate Into Your Curriculum Reproducible Handouts: – Discover MyPlate In A Year	10 minutes
Best Practices	20 minutes
Frequently Asked Questions	10 minutes
Suggested Post-Teacher Training Activities	5 minutes
Appendix: Handouts	Not Applicable

TABLE II. SHORT TRAINING WORKSHOP ITINERARY (2 ½ HOURS)

Training Guide Section	Time Required (does not include optional activities)
SESSION 1 (60 minutes) POWERPOINT SLIDES 1-32	
Welcome Childhood Obesity	20 minutes
Getting Healthy With <i>MyPlate</i> Reproducible Handouts: — <i>Health Self-Assessment</i> — <i>The Five Food Groups</i>	10 minutes
Taking a Closer Look at <i>Discover MyPlate</i>	30 minutes
[BREAK]	
SESSION 2 (45 minutes) POWERPOINT SLIDES 33-36	
How To Fit <i>Discover MyPlate</i> Into Your Curriculum Reproducible Handouts: — <i>Discover MyPlate In A Year</i>	45 minutes
[BREAK]	
SESSION 3 (45 minutes) POWERPOINT SLIDES 37-61	
Best Practices	30 minutes
Frequently Asked Questions	10 minutes
Suggested Post-Teacher Training Activities	5 minutes
Appendix: Handouts	Not Applicable



TABLE III: LONG TRAINING WORKSHOP ITINERARY (4-5 HOURS)

Training Guide Section	Time Required (includes all optional activities marked )
SESSION 1 (40 minutes) POWERPOINT SLIDES 1-18	
Welcome Childhood Obesity	20 minutes
Getting Healthy With <i>MyPlate</i> Reproducible Handouts: – <i>Health Self-Assessment</i> – <i>The Five Food Groups</i>	10 minutes + 10 minutes for optional activities
[BREAK]	
SESSION 2 (50 minutes) POWERPOINT SLIDES 19-32	
Taking a Closer Look at <i>Discover MyPlate</i>	15 minutes + 35 minutes for optional activities
[BREAK]	
SESSION 3 (45 minutes) POWERPOINT SLIDES 33-36	
How To Fit <i>Discover MyPlate</i> Into Your Curriculum Reproducible Handouts: – <i>Discover MyPlate In A Year</i>	45 minutes
[BREAK]	
SESSION 4 (45 minutes) POWERPOINT SLIDES 37-43	
Best Practices (In the Classroom, In the Cafeteria, Beyond the School, At Home)	30 minutes + 15 minutes for optional activities
[BREAK]	
SESSION 5 (45 minutes) POWERPOINT SLIDES 44-61	
Best Practices (Food Preparation, Food Safety)	30 minutes for food preparation activity
Frequently Asked Questions	10 minutes
Suggested Post-Teacher Training Activities	5 minutes
Appendix: Handouts	Not Applicable

Additional tips for trainers

- Provide training before the beginning of the school year so that teachers can integrate nutrition education into their long-range curriculum planning.
- Coordinate suggested implementation of **Discover MyPlate** with any school meal program and wellness initiatives.
- Invite State child nutrition agency staff and the school nutrition director(s) to collaborate and participate in training delivery. Nutrition staff can help support and expand upon the nutrition messages and objectives of **Discover MyPlate**. Having them partake in the training will also help them build relationships with trainees and teachers.
- Incorporate a physical activity break(s) into your training.
- Schedule a follow-up session mid-year for participants to share their progress, strategies, techniques, and successful/challenging experiences. Encourage participants to team up to support each other and share ideas throughout the school year.
- Request feedback from training participants on how well the training prepared them for using **Discover MyPlate**. Ask about tips they would give to other teachers regarding implementation of the curriculum.
- Share participant feedback, and yours, with Team Nutrition via email (teamnutrition@fns.usda.gov) to inform the development of additional nutrition education and training resources.



Teacher Training



Look for this icon which indicates the corresponding slide in the PowerPoint presentation.



Begin the Training Session and PowerPoint Presentation

1. Welcome

As training participants check in and enter the session, ask them to participate in the following welcome activity.



Welcome Activity [2 minutes]

Post the following questions on the board or on chart paper. Invite participants to answer questions independently by adding their responses to a scatter plot chart or continuum line in different color markers. Alternatively, sticky notes can be provided for participants to write their answers and place them on the board or chart paper. The responses will be discussed later.

- ***Do you teach nutrition?***
- ***How often do you eat school lunch with your students?***
- ***How many days a week do you eat breakfast?***

Welcome trainees. Begin by presenting and discussing the responses to the first question: *Do you teach nutrition?* (If working with a large group, ask for a show of hands.)



2. Childhood Obesity

Childhood obesity remains an important health concern. In the United States, childhood obesity has more than doubled in children and tripled in adolescents in the past 30 years.^{1,2}

The public health focus on childhood obesity reflects concern for children's health, not their physical appearance. Today, we are seeing more children and adolescents develop health problems that previously were not typically seen until adulthood.

¹ Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. JAMA. 2012; 307(5):483-490.

² National Center for Health Statistics. Health, United States, 2011: With Special Features on Socioeconomic Status and Health. Hyattsville, MD; U.S. Department of Health and Human Services; 2012.



Obesity in children and adolescents is linked to a number of health problems,³ including:

- High cholesterol, a condition in which high levels of a fat-like substance build up along arterial walls
- Type 2 diabetes and impaired glucose tolerance, a disorder in how the body uses digested food for growth and energy
- High blood pressure, which creates a higher force of blood flow and makes the heart pump harder
- Social difficulties, poor self-esteem, and increased incidents of bullying and stigmatization due to weight
- Sleep disturbances and sleep apnea, which result in shortened and restless sleeping time
- Orthopedic problems in bones, joints, ligaments, tendons, muscles, and nerves

What Do You Notice?

What types of foods and beverages do children in your school consume? All children, especially when young, need your help to learn how to make healthy food choices and be more physically active.



Journal & Discussion Activity [5 minutes]

Ask participants: *What does **nutrition education** mean to you? Does your school currently offer **nutrition education**? What benefits can **nutrition education** provide to you, your students, and your school community?* Give everyone a few minutes to write down their responses, and then invite any volunteers to share with the group.

Benefits Now and Later

There are many advantages to helping kids learn about nutrition and the importance of physical activity. Some benefits you might observe this school year, others might be realized years down the road. For example, children with healthier eating and physical activity patterns tend to:

- Perform better academically
- Have lower rates of obesity
- Learn the skills they need for lifelong healthy habits

DID YOU KNOW ?

- The top sources of energy (calories per day) for kids ages 2-18 are grain desserts (such as cookies and cakes), pizza, and soda.⁴
- Only 26% of kids ages 6-11 eat the recommended amount of fruits, and only 16% eat the recommended amount of vegetables.⁵



³ School Health Guidelines to Promote Healthy Eating and Physical Activity, Centers for Disease Control and Prevention, Accessed January 27, 2014. <http://www.cdc.gov/healthyyouth/npao/presentation.htm>.

⁴ Reedy J, Krebs-Smith, J. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. J Am Diet Assoc. 2010 Oct; 110(10):1477-84.

⁵ Lorson BA, Melgar-Quinonez HR, Taylor CA. Correlates of fruit and vegetable intakes in US children. J Am Diet Assoc. 2009 Mar;109(3):474-8.





School Meals Are Healthier

Share the results of the welcome activity poll question: *How often do you eat school lunch with your students?* School meals have become healthier. The **Healthy, Hunger-Free Kids Act of 2010** resulted in new school meal patterns that focus on whole grains, fruits, and vegetables; provide low-fat or fat-free milk; and set limits on sodium and solid fats.



Learn more about school meals at:

<http://www.fns.usda.gov/healthierschoolday>

School meals are balanced meals, with “right-sized” portions for children and an appropriate balance between all of the food groups. School meals provide a great opportunity to apply nutrition education learned in class. Fun and interactive nutrition education can also help encourage children to try some of these tasty new offerings in the school cafeteria. For some students, it may be the first time they have been offered a particular fruit, dark-green vegetable, whole grain, or even low-fat milk.



The Importance of Breakfast

Share the results of the welcome activity poll question: *How many days a week do you eat breakfast?* Students who eat a healthy breakfast have better attention, memory, and do better on tests. However, only 50% of children who are eligible participate in the free or reduced-price **School Breakfast Program**.

Self-Reflection

As educators teaching nutrition, it is important to be aware of, and reflect on, our own habits in order to be healthy role models for students.



Provide each participant with two copies of the **Health Self-Assessment** (customize the template on pp. A1-2 of the Appendix, if desired). They will complete one in the next activity, and one at the end of the training.



Assessment Activity [5 minutes]

Give participants 5 minutes to complete the **Health Self-Assessment**. Start a discussion by inviting them to answer the following questions: *What does being healthy mean to you? What are ways you try to be a healthy role model? What nutrition and physical activity goals can you accomplish this year?*

3. Getting Healthy with *MyPlate*



Meet *MyPlate*

Poll Activity [2 minutes]


Show the **MyPlate** icon on the screen. Take a quick poll by asking participants: *Who has seen this icon before? What is **MyPlate**? What do you notice about the icon?*

The **MyPlate** icon serves as a visual reminder to eat foods from the five food groups every day. The icon replaced **MyPyramid** (the former food guidance system) in 2011. Using a familiar image — a place setting for a meal — it shows how to create a balanced meal.

The Five Food Groups



The five food groups are: **Fruits, Vegetables, Grains, Protein Foods,** and **Dairy.**

 Provide each participant with a copy of **The Five Food Groups** handout on pp. B1-3 (of the Appendix), which lists foods that belong to each group.

 Learn more about **MyPlate** by visiting:
<http://www.choosemyplate.gov>

“Anytime” Foods



Having a balanced diet is also about choosing foods with less solid fats, added sugars, and sodium. Older students and adults can read the ingredients list and the **Nutrition Facts label** to inform them about the nutritional value of the food they are eating. For younger students, you can use the simplified terms “**anytime**” foods and “**sometimes**” foods to help children recognize which foods to eat more and less of respectively.

- “**Anytime**” foods are the healthiest options and are lower in solid fats, added sugars, and sodium (salt). We want to choose “**anytime**” foods more often.

Examples of “**anytime**” foods:

- Whole-grain toast
- Low-fat yogurt
- Carrot sticks
- Fruit
- Seafood and lean meats
- Lean chicken and turkey





- **“Sometimes”** foods have more solid fats, sodium (salt), and/or added sugars. They are foods we want to eat less of. We might eat these foods on a special occasion or as an infrequent treat, but not every day.

A **“sometimes”** food can belong to a food group. Like other foods in the Dairy Group, whole milk provides calcium and other nutrients. However, whole milk is also high in solid fats. A healthier **“anytime”** choice from the Dairy Group is low-fat or fat-free milk, which provides the same nutrients, but is low in solid fats.

Other **“sometimes”** foods do not belong to a food group. They provide little to no nutrition and are mostly made up of solid fats or added sugars. Examples of **“sometimes”** foods that **do not** belong to a food group are candy, cream cheese, soda, and jam.

Examples of **“sometimes”** foods:

- Cookies
- Donuts
- Pastries
- Sugary cereals
- Bacon
- Whole milk



Be careful not to depict foods as “good” or “bad” foods. Teaching children about “anytime” and “sometimes” foods helps them to learn the idea of moderation.



Solid fats are fats that are solid at room temperature — such as butter, stick margarine, chicken fat, beef fat, pork fat (lard), and shortening. Most solid fats are high in saturated fats and/or *trans* fats. Saturated fats and *trans* fats tend to raise “bad” (LDL) cholesterol levels in the blood. This, in turn, increases the risk for heart disease. Solid fats can be found in foods such as hot dogs, sausages, bacon, regular cheese, whole milk, cakes, cookies, and other baked goods. (Milk fat is solid at room temperature but it is suspended [mixed throughout] in the fluid milk by the process of homogenization.)

In contrast to solid fats, oils are fats that are liquid at room temperature like the vegetable oils used in cooking. Oils are generally better for your health than solid fats because they contain less saturated fats and/or *trans* fats. Foods such as avocados, olives, and some fish contain healthy oils.

Added sugars are sweeteners, sugars, and syrups that are added to foods during processing. Most Americans eat too many foods that are high in added sugars, such as sodas and other sweetened drinks, candy, ice cream, cookies, cakes, and sugary cereals. Check the ingredients list on a food or beverage package. If a form of sugar is listed among the top three ingredients, the food is probably high in added sugars. Some types of added sugars are: high-fructose corn syrup, corn syrup solids, malt syrup, molasses, sucrose, dextrose, lactose, maltose, brown sugar, and honey.



It's important to note that sugars are found naturally in fruit (fructose), milk, and other dairy products (lactose). These sugars are part of the naturally occurring package of nutrients these fruit and dairy products provide. Added sugars, like those found in a candy bar or in a can of soda, add calories but no nutrients. That's why low-fat milk and an apple are “**anytime**” foods, while a cupcake is a “**sometimes**” food.


 Learn more about the ***Dietary Guidelines for Americans*** by visiting and downloading: <http://health.gov/dietaryguidelines/>

Getting Enough Daily Physical Activity



Being healthy is not only about making healthy food choices and eating balanced meals. It is also about being physically active. For optimal health, it is recommended that:

- Young children (ages 2-5) should play actively several times a day. A specific amount of time is not recommended, but activities should be developmentally appropriate, fun, varied, and can occur in short bursts throughout the day.
- Children and adolescents (ages 6-17) should get at least 60 minutes of physical activity each day.
- Adults (ages 18-64) should do at least 2 hours and 30 minutes each week of aerobic physical activity at a moderate level OR 1 hour and 15 minutes each week of aerobic physical activity at a vigorous level. Being active 5 or more hours each week can provide even more health benefits. Spreading aerobic activity out over at least 3 days a week is best. Also, each activity should be done for at least 10 minutes at a time. Adults should also do strengthening activities, like push-ups, sit-ups, and lifting weights, at least 2 days a week.

 Learn more about physical activity by visiting: <http://www.choosemyplate.gov/physical-activity.html>





Optional Brainstorming Activity [10 minutes]:

Ask teachers to brainstorm ways to integrate more physical activity into the day — for their students, for themselves, and for the entire school staff. Then ask them to share ideas with the rest of the group. Keep track of everyone’s contributions using the board.

For example:

For students:

- Make physical activity a daily part of the classroom experience.
- Create dances for students to move every part of their body.
- Play cooperative games that integrate movement.
- Collaborate with physical education teachers to set up a fun obstacle course or host dance-offs with other classes.

For teachers:

- Volunteer for recess duty and play actively with students.
- Walk laps around the school during breaks or after school.
- Walk or bike to school.
- Take the stairs instead of the elevator.



4. Taking A Closer Look At Discover MyPlate

Research shows that knowing how to eat healthy doesn’t always mean that a person will choose nutritious foods. Behavior change is more likely when nutrition education allows children to practice new skills, helps them build self-efficacy, provides positive reinforcement for healthy eating behaviors, and offers opportunities for observational learning (such as role modeling). Taste-test experiences and hands-on, inquiry-led activities help engage young children and make healthy eating and physical activity fun.



Discover MyPlate is designed to do just that. There are six standards-based, inquiry-led, student-centered, and teacher-approved lessons that integrate nutrition education into **Math, Science, English Language Arts**, and **Health**. Through fun, interactive, engaging, and developmentally appropriate learning activities, children will:

- Discover how to make healthy choices for breakfast, lunch, dinner, and snacks.
- Explore healthy choices from each of the **MyPlate** food groups.
- Discover the colorful variety of fruits and vegetables and how they grow.
- Identify feelings of hunger and fullness.
- Experience the fun and importance of being physically active.



Team Up With School Nutrition Services



Meet with your school district's **Nutrition Services Director** and school nutrition professionals (i.e., school food service) when planning how you will use the curriculum. More strategies for making the connection in the cafeteria are provided later in this training guide (see p. 26). Cafeteria connections and food preparation activities give your students the important opportunity to practice what they are learning in the classroom about making healthy food choices.

NOTE: Introduce your State child nutrition agency staff and/or the school nutrition director(s) to trainees and invite them to share suggestions for how to contact and collaborate with them.

Discover MyPlate Kit



Display and identify each of the 10 **Discover MyPlate** kit components listed below for participants. Introduce and walk through the elements of each component, listed on pp. 16-21.

 To order more copies, use the Team Nutrition order form at: <http://tn.ntis.gov>

Exploration Activity [10 minutes]

After kit components have been introduced, let groups individually look through them all. Direct them to the **Getting Started** section on pp. 1-7 in the **Teacher's Guide** where they can read more.

Alternate "Jigsaw" Activity [10-15 minutes]

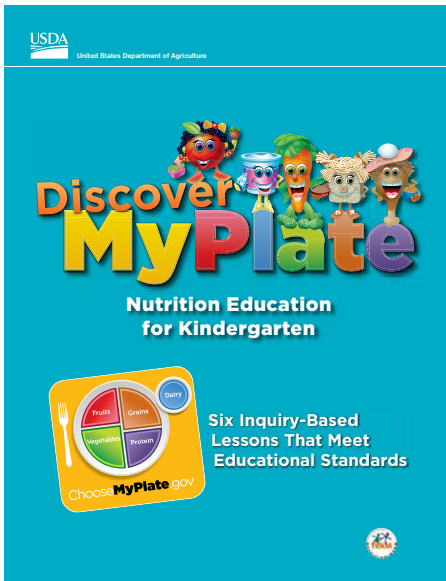
Assign each group one component to review in depth (or with small training groups, assign a different component to each participant). When they are done reviewing, ask participants or groups to share their component with the rest of the group and explain how it is used in the program.

Additional Optional Activities

Try the activities listed under each of the components (listed on the following pages) to give teachers more exposure to the program materials and help them understand how to use each within the program. If you don't have time, these activities can be completed as "homework" or with peers after the training. Participants can submit their feedback and impressions via email (or other online modes, such as a shared document, survey, or form) or at a follow-up session. They can also be completed during a curriculum-planning session.



Discover *MyPlate* Kit Components



*The **Teacher's Guide** is very teacher-friendly and easy to follow. The essential questions and learning objectives are right there [at the start of each lesson].*

TEACHER,
PILOT STUDY SCHOOL

1. Teacher's Guide



<http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- **Letter to Teachers**
- **Getting Started** (pp. 1-7)
 - Lessons-at-a-Glance Chart (pp. 8-9)
 - Lesson topics, learning objectives, and learning activities are listed by lesson
- **Lesson Structure** (described on p. 1)
 - Lesson Overview, Supplies and Preparation, Learning Objectives, Essential Questions
 - Introduction (Warm Up, Song), Core Learning Activities (Book Club, Food Club, Cafeteria Connections), Center Time (Food Cards, Dramatic Play, Student Workbook activities), Reflection & Assessment (Reflection, STAR Chart/Achievement Markers), Extra Helpings
- **The Six Discover *MyPlate* Lessons**
 - Lesson 1: Meet the Five Food Group Friends (p. 16)
 - Lesson 2: Discover ***MyPlate*** (p. 26)
 - Lesson 3: Eat Your Colors! (p. 32)
 - Lesson 4: Planting the Seeds for Healthier Eating (p. 40)
 - Lesson 5: Starting Our Day With ***MyPlate*** (p. 47)
 - Lesson 6: Let's Play, Let's Party! (p. 54)



Optional Resource Activity [10 minutes]

Have teachers look at the recommended books for the **Book Club** in each lesson. Ask: *Which of these resources do you have in your classroom or in the school library? Which books can you share? Which can you order?*



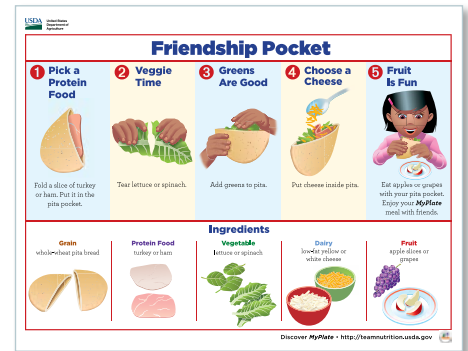
2. Food Club Activities (Look and Cook Recipes & Teacher Instructions)

(located on pp. 66-78 of Teacher's Guide)

 <http://www.fns.usda.gov/tn/discover-myplate>


Take a closer look at:

- **Friendship Pocket** recipe & instructions (pp. 67-69)
 - Lesson 1 Food Club activity (pp. 22-23)
- **Crunchy Rainbow Wrap** recipe & instructions (pp. 70-72)
 - Lesson 3 Food Club activity (p. 36)
- **Fruit-a-licious Breakfast Cup** recipe & instructions (pp. 73-75)
 - Lesson 5 Food Club activity (pp. 50-51)
- **Food Group Friend** recipe & instructions (pp. 76-78)
 - Lesson 6 Food Club activity (pp. 57-58)



3. Classroom Celebrations

(located on pp. 61-65 of Teacher's Guide)

 <http://www.fns.usda.gov/tn/discover-myplate>

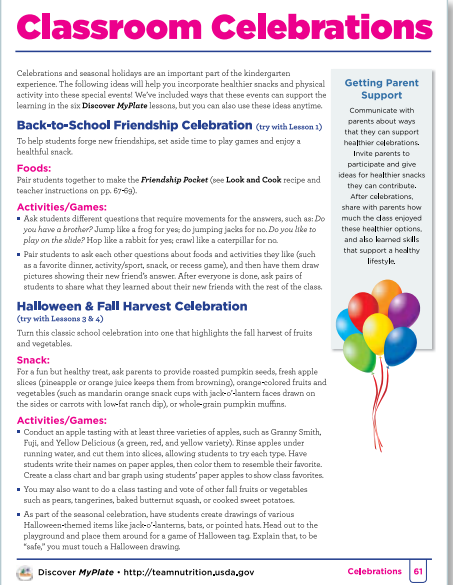
Take a closer look at:

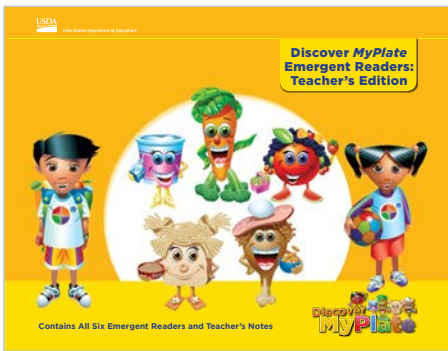
- **Back-to-School Friendship Celebration** (p. 61)
- **Halloween & Fall Harvest Celebration** (p. 61)
- **Thanksgiving Celebration** (p. 62)
- **Welcome Winter! Celebration** (p. 62)
- **Valentine's Day Celebration** (p. 63)
- **100th Day of School Celebration** (p. 63)
- **St. Patrick's Day & Dr. Seuss's Birthday Celebrations** (pp. 63-64)
- **Swing into Spring Celebration** (pp. 64-65)
- **Earth Day Celebration** (p. 65)
- **End of School Year Celebration** (p. 65)



Optional Brainstorm Activity [5 minutes]

Ask participants: *Are there any additional celebration ideas that you can add, or existing celebrations you can modify, to be healthier?*






*[The **Emergent Readers**] matched with the Common Core standards and the kids really enjoyed them.*

TEACHER,
PILOT STUDY SCHOOL



4. Emergent Readers


(1 teacher edition & 6 student books)

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- Introduction for teachers (first page of teacher edition)
 - Features high-frequency sight words for kindergarteners
 - Varying difficulty to help kindergarten students build literacy skills
- Activities for each reader (pp. 11, 23, 35, 47, 59, 71 of teacher edition)
- Mini-books for students
 - Students may color in illustrations
 - Copies can be sent home when completed

5. Food Group Friends Profile Cards

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- Farrah Fruit
- Reggie Veggie
- Jane Grain
- Dean Protein
- Mary Dairy
- MyPlate Nate and MyPlate Kate

Optional Game Activity [5 minutes]

Play a game. Without looking at the back of the character cards, challenge participants to identify what foods each of the characters are made of. A projector can also be used to display each character. Answers are located on the back of the cards. (For large groups, have participants quiz each other.)

6. The Five Food Groups Poster

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- The food illustrations in each food group on the **MyPlate** icon
- How the poster is used in Lessons 1-4

Optional Brainstorm Activity [5 minutes]

Have participants brainstorm additional ways to use the poster interactively in class, aside from the activities in Lessons 1-4.



7. Food Cards

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- The 40 **Food Cards**
- The colored border on each card corresponds to the color of a food group on the **MyPlate** icon
- The bean cards feature both the Vegetable and the Protein Foods food group colors because beans are in both food groups.

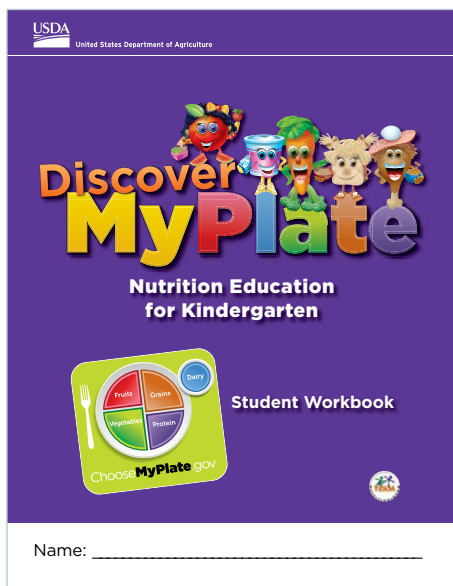
Optional Sorting Activity [5 minutes]

Have participants work in groups to sort and match **Food Cards** to their appropriate food group on the poster.



*The **Food Cards** are great. The cards can be pulled out and used as a quick discussion.*

TEACHER,
PILOT STUDY SCHOOL




*[The] **Student Workbook** emphasized the use of critical thinking to make choices in completing a **MyPlate** meal.*

TEACHER,
PILOT STUDY SCHOOL



8. Student Workbook

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- The **STAR** (Student Achievement Recognition) **chart** and achievement markers for each lesson (first 3 pages), and information about it in **Getting Started** (p. 6 of **Teacher's Guide**)
- Activities (pp. 5-28)
- **Discover MyPlate Certificate** (p. 29)
- The answer key to activities (pp. 80-81 of **Teacher's Guide**)

9. Reach for the Sky Song

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- Song lyrics (p. 79 of **Teacher's Guide**)
- How the song is used in Lessons 1, 2, 3, and 6

Song Activity [5-7 minutes]

Download the song in advance (or use CD). Play the song once or twice for participants. Have teachers brainstorm ways they can use the song during a regular school day. For example: in the morning or afternoon as a “wake-up” activity, as a classroom activity break, physical education class, or classroom celebrations.

10. Parent Handouts

 <http://www.fns.usda.gov/tn/discover-myplate>

Take a closer look at:

- Overview of five handouts and connections to Lessons (p. 7 in **Teacher's Guide**)
 - Welcome to School Lunch
 - Meet **MyPlate**
 - Be Your Best With Breakfast
 - Move, Play, Have Fun!
 - Snack Time!

Note: Tips and ideas to engage and involve parents are covered in an activity on p. 27.



“ Since [my daughter] has been bringing these [handouts] home, they have been helping me also, to watch how I eat and how I prepare my meals.

PARENT,
PILOT STUDY SCHOOL

I was really impressed that we spent six whole weeks on a topic and got to dig in really deep. My students are still talking about sugar, grains, and vegetables. I really feel like it's going to be a lifelong skill.

TEACHER,
PILOT STUDY SCHOOL



5. How to Fit **Discover MyPlate** Into Your Curriculum

Education Standards

Discover MyPlate makes it easy to integrate nutrition education into the day-to-day curriculum. Learning activities are aligned to national education standards (including Common Core) in **English Language Arts, Math, Science, and Health** subjects.

Education standards met by the curriculum are listed in a chart in the **Teacher's Guide** on pp. 10-15, and are organized by lesson and learning activity.

For schools needing to meet State-specific standards in any of the subjects, work with your school's or district's curriculum coordinator to align **Discover MyPlate** lessons to your State's requirements.



Curriculum Planning Activity [20 minutes]

Have groups work together to look at specific State standards, their school curriculum, and units planned for the year in order to come up with ways to integrate **Discover MyPlate** lessons into their school year. This activity is especially appropriate for curriculum mapping or planning meetings.



Pacing Recommendations

The **Discover MyPlate** curriculum can be taught as a comprehensive 6-week unit, but is designed so that it can be easily integrated into, and extended throughout, the school year. Elements of lessons such as the **Book Club, Extra Helpings, Cafeteria Connections, and Classroom Celebrations** can help keep nutrition education in front of kids all year long.



Make copies of the sample **Discover MyPlate in a Year** on p. C1 (of the Appendix) for participants to use as a model for teaching the curriculum over 10 months.



Curriculum Planning Activity [20 minutes]

Have participants choose one lesson to review. Working in pairs or small groups, have teachers plan how to integrate the activities into a regular school week. Ask: *What other curriculum connections can you make? Are there school events that can be aligned with the lessons?*

Additional Tips to Extend Learning



- Collaborate with other teachers, including physical education, art, music, and health teachers (or the school nurse), to support and promote key learning objectives and maximize the impact of the program.
- Team up with teachers for peer support or to partner-teach lessons.
- Collaborate with other teachers for additional ideas on integrating nutrition education into other subject areas. For example:
 - English Language Arts
 - Create shopping lists with new food vocabulary learned.
 - Write healthy poetry.
 - Have children write “all about me” sentences about making healthy food choices and physical activities. (For example: *My favorite fruit is apple. Mom’s favorite fruit is banana. I like to jump rope.*)
 - Make an alphabet list or memory game using foods.
 - Write a class recipe for a favorite healthy snack.
 - Math
 - Use fruits or vegetables to count or sort.
 - Conduct student surveys about nutritious foods and physical activity. Graph results.
 - Science
 - Have a bean seed race.
 - Grow, or help take care of, a class/school/community vegetable garden.
 - Social Studies/Geography
 - Discuss the cultural diversity represented through food. What types of food are eaten within your community?
 - Talk about what foods Native Americans, pilgrims, George Washington, or Abraham Lincoln ate or grew.
 - Learn what foods grow in your State.
 - Discover where students’ favorite fruits and vegetables come from and how they get from farm to plate.
 - Physical Education
 - Play relay games using the **Food Cards**.





Optional Brainstorming Activity [10 minutes]

Group participants by subject area to brainstorm additional ideas for integrating the nutrition topic and healthy themes into core subjects and their everyday teaching.



School Wellness Policy Connection

Review the school district's **Local School Wellness Policy** and see how your current activities and how **Discover MyPlate**, fit into the overall culture of wellness at your school. (In addition to district wellness policies, note that some schools have developed their own individual wellness guidelines.) The policy is explored in more depth in the **Post-Training Activities** (on p. 35).

6. Best Practices

The following best practices have been organized to help teachers integrate nutrition education into their day and transform their students' learning environments into healthy places.

IN THE CLASSROOM



Think Healthy in the Classroom: Replace food rewards like candy or sweets with non-food prizes and privileges. For example, offer coupons for extra quiet reading time, listening to music, a chance to be the teacher's helper, or lunch with the teacher; or offer extra pencils, stickers, art supplies, or small toys. Stock classroom reading corners with books about healthy habits and foods. Start with the **Discover MyPlate Book Club** list. Provide healthy play foods like fruits, vegetables, and low-fat milk in dramatic play areas (if applicable).



Optional Idea Sharing Activity [5 minutes]

Ask teacher participants for more ideas to share. List ideas on the board. Then, have teachers choose five to start using right away.



Celebrate Healthy: Modify existing celebrations with healthier versions. Start with the list of healthy classroom celebration ideas on pp. 61-65 in the **Teacher's Guide**. Teachers can also request that parents bring in healthy snacks and limit sugary treats.



Optional Idea Sharing Activity [5 minutes]

Have participants share more ideas and then identify at least three celebrations from the list (including any suggested in the previous activity) that they can include during the school year.

Show Healthy: Display visuals that serve as healthy reminders for students. Start by displaying **The Five Food Groups** poster. Create bulletin board displays featuring healthy food choices, such as fruits and vegetables, and pictures of physical activity.



Discussion Activity

Ask participants to assess their classrooms. Ask: *What are at least three ways you can create a healthier classroom?*

Model Healthy: Teachers are important role models for their students, so it is important to teach by example and model making healthy food choices and being physically active. Creating a supportive and fun learning environment is essential to healthy behavior change. Many children will be learning about and trying foods for the first time. Therefore, it is important to offer support, encouragement, and frequent positive feedback.



Optional Reflection Activity [5 minutes]

Ask participants to reflect back on the **Health Self-Assessment** they completed earlier (on p. 10). Have them write down at least five tangible things they can do differently, beginning today, to lead a healthier lifestyle.

I know [students] are more conscious [about having] fruits and veggies on their tray. They're making a bigger effort to get to the salad bar. I think they are more open to talk to us and ask questions; parents and students.

SCHOOL NUTRITION
DIRECTOR, PILOT STUDY
SCHOOL



Goal Planning Activity [10-15 minutes]

Ask participants to collaborate in their groups and create a checklist of things they can do as a team to:

- Create a supportive and healthy learning environment.
- Be a healthy and positive role model.

For example (reference prior sections for more ideas):

- o During the first quarter, I will create a **MyPlate** bulletin board display.
- o During my lunch break, I will walk around the school field.
- o Instead of giving out candy to reward positive behavior, I will ____.
- o Instead of counting sugary cereal in math, my class will ____.
- o Instead of decorating cookies for our ____ celebration, my class will ____.

Provide groups with chart paper to write down and share their healthy “to-do” list.

IN THE CAFETERIA

Connect to the Cafeteria in Every Lesson: The **Discover MyPlate** curriculum offers several opportunities to make connections between the classroom and cafeteria.

For example:

- Suggestions for when to collaborate with, or seek support from, your school's Nutrition Services Director
- Activities where students explore the workings of the cafeteria or meet personnel
- Opportunities for teachers and students to examine the school lunch or breakfast menu together

Collaborating with the school's Nutrition Services Director or department will enhance and support any nutrition education and food preparation activities.



BEYOND THE SCHOOL

Engage the Community: Contact local experts and community groups and ask for their help with **Discover MyPlate**. Your school's parent organization may already have connections and can help you mobilize these resources as guest speakers, volunteers, or for funding. Reach out to:



*The facts
[on the parent
handouts] have
really helped me.
I was surprised at
how much sugar
was in sodas!
I haven't bought
any since.*

PARENT,
PILOT STUDY SCHOOL

- Local gardens or school gardens

Find out more about Farm to School at:
<http://www.fns.usda.gov/farmtoschool>

- Local chefs or culinary students

Discover Chefs Move to Schools at:
<http://healthymeals.nal.usda.gov/chefs-move-to-schools>

- Local Cooperative Extension staff

Learn more at: <http://www.nifa.usda.gov/Extension/>

- Local farmers, grocers, community groups, and local businesses (for food donations and/or funding)
- Local dietitians or dietetic students/interns

AT HOME

Engage Parents: Engaging parents and families of kindergarteners will be essential to students' progress. The **Discover MyPlate** program includes five **Parent Take Home** handouts that are quick to read, visually engaging, and offer valuable information and parent-child bonding opportunities. Links to topics in each of the six lessons are provided in the **Getting Started** section on p. 7 of the **Teacher's Guide**, making it easy for teachers to know when to send each flyer home. Handouts and reminders can be sent home in monthly newsletters, emails, class blog posts, or in students' weekly folders in order to share with parents what their children are learning in class. **Parent Take Home** handouts are also available in Spanish.



*I just recently
changed my bread
to whole wheat.
I didn't read
ingredients before,
but now I do.*

PARENT,
PILOT STUDY SCHOOL

To request free print copies or download online, visit:
<http://www.fns.usda.gov/tn/discover-myplate>

To establish a communication channel between the classroom and students' homes, teachers can do the following:

- Send parents an initial letter letting them know about the **Discover MyPlate** program and materials they can expect to receive (**Parent Take Homes, Look and Cook Recipes, Emergent Readers**). See a sample letter to parents on p. 7 of the **Teacher's Guide**. An invitation template to parents to join in the Lesson 6 **Food Club** activity can be found on p. 60 of the **Teacher's Guide. Student Workbooks** can be sent home upon completion of the lessons.



“Since we started this, my child wants more fruits... yesterday, she brought a grapefruit, and she said, ‘you have to eat this because it’s good for you.’”

PARENT,
PILOT STUDY SCHOOL

“The food preparation activities are a great way to get kids to try new foods. They look forward to [those] each [week]. They ask ‘What are we going to make today?’”

TEACHER,
PILOT STUDY SCHOOL

- Send **Discover MyPlate STAR Charts** (found on the first three pages of the **Student Workbook**) home or share during parent-teacher conferences as part of student progress reports.
- Coordinate with school nutrition professionals to send home additional information on school breakfast and lunch programs.
- Work with the school’s parent organization (e.g., PTA, PTO, etc.) to enlist help in the form of volunteers, funds, and food and supplies donations. Parent volunteers will be particularly helpful during:
 - **Food Club, Look and Cook Recipe** activities, and **Classroom Celebrations**.
 - **Classroom Celebrations**
 - Celebrations are an important part of the kindergarten experience. Ideas for incorporating healthier activities and foods into your classroom celebrations and academics throughout the school year are listed on pp. 61-65 of the **Teacher’s Guide**. Each celebration notes the appropriate lesson for pairing and offers a healthy snack idea as well as activities and games. For example, the **Back-to-School Friendship Celebration**, which includes the **Friendship Pocket Look and Cook Recipe** from Lesson 1, is good to try at the beginning of the school year. It gives children a chance to get to work together and make new friends through a healthy and fun food preparation activity while introducing the topic of nutrition.
 - Plan nutrition-focused events like a “Family Health Night.”

FOOD PREPARATION

Make. Learn. Taste: Opportunities to see, smell, touch, taste, and explore healthy foods help children overcome their reluctance to trying new foods and are critical for changing eating behaviors. **Discover MyPlate** includes four teacher-tested and student-approved recipes and food preparation activities that work in class settings.

Look and Cook Recipes are located on pp. 67-78 in the **Teacher’s Guide**, and are part of the **Food Club** activities in Lessons 1, 3, 5, and 6.

Teachers may be apprehensive to try a food preparation activity in the classroom with dozens of kindergarten students and limited time. However, the following tips and tested strategies can make any food preparation activity a fun, enjoyable, and memorable learning experience for both teacher and students!

Food Club Tips:



- Plan ahead. Prepare ingredients ahead of time (e.g., rinse and chop vegetables).
- Talk with parents and the school nurse about food allergies. (See next section on **Food Safety**.)
- Study the **Look and Cook Recipes** and corresponding instructions in each lesson to determine what supplies are needed. (See table on p. 17 for page numbers.)
- See the **Look and Cook Recipes** for possible modifications to ingredients.
- Team up with a colleague to partner-teach the food preparation activity.
- Ask for food donations and supplies.
- Enlist parent volunteers, community chefs, or Registered Dietitians to provide extra help during the activity.
- Collaborate with school nutrition (i.e., school food service) staff on strategies for storing and obtaining food, food preparation location, etc.
- For time efficiency, set up the activity in advance, either in the classroom or cafeteria, with more than one food preparation station.
- Keep perishable foods refrigerated until ready to use.

*The **Crunchy Rainbow Wrap** (Lesson 3) was a big hit. I overheard [a child saying] 'this was the best day ever.'*

TEACHER,
PILOT STUDY SCHOOL



Food Preparation Activity [30 minutes]

Try one food preparation activity as a whole group or assign one of each **Look and Cook Recipes** to smaller groups. Provide all ingredients and supplies listed for each recipe. Teachers should read through and follow the instructions in the **Teacher's Guide** and practice setting up, preparing, and tasting recipes. Discuss challenges, how to plan logistically, and how to encourage kids to try new foods.

FOOD SAFETY

Food Allergies: Each year, millions of Americans have allergic reactions to food. Although most food allergies cause relatively mild and minor symptoms, some food allergies can cause severe reactions or be life-threatening. More than 170 foods are known to cause an allergic reaction in some people. However, the eight most common food allergens are:



- | | | |
|--------------|------------|---|
| 1. Fish | 4. Milk | 7. Tree nuts (e.g., walnut, almond, hazelnut, |
| 2. Shellfish | 5. Wheat | cashew, pistachio, and Brazil nuts) |
| 3. Eggs | 6. Peanuts | 8. Soybeans |





Know the Symptoms

It is important to know the symptoms of food allergies, which typically appear within a few minutes to a few hours of exposure.

Review the **Food Allergy** symptoms that are listed in detail on p. 5 in the **Teacher's Guide**.



For additional food allergy management and prevention information, refer to the **Centers for Disease Control and Prevention's** *Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs*:
<http://www.cdc.gov/healthyyouth/foodallergies/index.htm>



Optional Guest Speaker Activity [15 minutes]

Invite the school nurse to speak about food allergies and proper preventative and response procedures. If there is not enough time, have teachers arrange a meeting with the school nurse prior to conducting a food preparation activity.



Safe Practices: Good food safety practices are critical to preventing foodborne illness or the spread of bacteria.

Review the **Food Safety** guidelines on p. 5 in the **Teacher's Guide**. Follow these procedures when conducting any food preparation activities.

Everyone (teachers, students, and helpers) should wash his/her hands in warm water and soap for at least 20 seconds before and after handling food, and after using the bathroom.

Lesson 1 includes fun and impactful hand-washing experiments to do with students. (See pp. 21-22 in the **Teacher's Guide**.) The **Student Workbook** also features a pictorial activity about proper hand washing on p. 11.


7. Frequently Asked Questions



What is a whole grain? **MyPlate** encourages us to make half of the grains we eat whole grains. Whole grains are rich sources of vitamins, minerals, fiber, and other nutrients that help keep kids healthy and



strong. Adults benefit from whole grains, too. Eating whole-grain foods that are high in fiber can help protect against heart disease, reduce the risk of type 2 diabetes, support a healthy body weight, and is good for overall health. Some foods are always whole grains, like oatmeal, brown rice, wild rice, and popcorn. For other foods you will need to check the ingredients list: Look for the word “whole” before the first ingredient.

 Additional information about whole grains can be found by visiting: <http://www.fns.usda.gov/core-nutrition/whole-grains>

Quiz Activity [5 minutes]

Ask participants if they can tell which food is a whole-grain food based on the ingredients. They should look for the word “whole” before the first ingredient. (The tortilla, cereal, and cracker are whole grains because they list “whole” grains.)

50

Some examples of whole-grain ingredients include:

brown rice
buckwheat
bulgur
graham flour
oatmeal
quinoa
rolled oats
whole-grain barley
whole-grain corn
whole oats
whole rye
whole wheat
wild rice

Are fat-free and low-fat milk as nutritious as whole milk? Did you know that milk is loaded with vitamins, minerals, and protein, with nine (9) key nutrients? Better yet, fat-free and low-fat (1%) milk still deliver this nutrition, just without the extra fat that is in whole and reduced-fat (2%) milk.

51


Why should kids drink milk every day? Many children are not getting enough milk to keep their bodies growing strong.

52

- Milk helps muscles move and refuels muscles after play.
- Protein and other nutrients in milk help kids grow and build muscle and other tissue.
- The calcium and vitamin D in milk are needed for strong bones.

What if a student is vegetarian? Vegetarian diets can incorporate plant-based protein foods, including beans, nuts, nut butters, peas, and soy products (tofu, tempeh, veggie burgers). Lacto-ovo vegetarians also eat eggs, which are also part of the **Protein Foods Group**. They also consume milk and cheese from the **Dairy Group**.

53

 Additional tips and resources for vegetarians can be found by visiting: <http://www.choosemyplate.gov/healthy-eating-tips/tips-for-vegetarian.html>

What if a student does not drink milk? Calcium-fortified soymilk (soy beverage) is an option as part of the **Dairy Group**. Not all soymilks have calcium. Individuals that drink soymilk should choose one that has about 300 milligrams (mg) of calcium (30% of the Daily Value).

54





Why are beans and peas unique foods? Beans and peas belong to both the **Vegetable** and **Protein Foods Groups**. Beans and peas are the mature forms of legumes. They include kidney beans, pinto beans, black beans, lima beans, black-eyed peas, garbanzo beans (chickpeas), split peas, and lentils. They are available in dry, canned, and frozen forms. These foods are excellent sources of plant protein and also provide other nutrients such as iron and zinc. They are similar to meats, poultry, and fish in their contribution of these nutrients. Therefore, they are considered part of the **Protein Foods Group**. Many people consider beans and peas to be vegetarian alternatives for meat. However, they are also considered part of the **Vegetable Group** because they are excellent sources of dietary fiber and nutrients such as folate and potassium. These nutrients, which are often low in the diet of many Americans, are also found in other vegetables.



Why aren't green beans in the Protein Foods Group? Green beans are not a mature form of legume. It is not a “bean.” Green beans are part of the “Other” vegetable subgroup. Their nutrient content is similar to other vegetables in that subgroup like iceberg lettuce and celery.



Why is a tomato (and squash, pepper, etc.) part of the Vegetable Food Group? Botanists (plant scientists) and nutritionists (food and health experts) classify plant parts differently. Botanists classify edible plant parts based on their function and where in the plant they are located. (For example, tomatoes, zucchini, and red bell peppers are considered by botanists to be fruits because they contain seeds.) Nutritionists, however, call them vegetables and organize foods (including those that come from edible plant parts) into different food groups based on what they provide to keep the body healthy, how they taste, and also how they are normally eaten. Tomatoes, for example, are normally eaten as a vegetable, such as in a garden salad or with lettuce and onion on a sandwich. Tomatoes are also not tart and sweet like cherries and other foods we consider to be fruits. That's why nutritionists consider tomatoes a vegetable instead of a fruit.

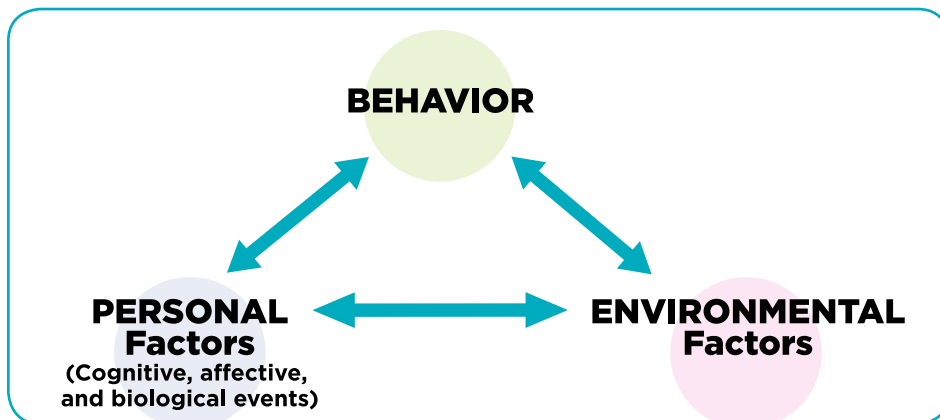


If all activities are taught, how many hours of nutrition education will kids receive through Discover MyPlate? All lesson activities amount to 17.25 hours of nutrition education, including **Extra Helpings**. This does not include **Book Club**, **Student Workbook** activities, or **Classroom Celebrations**, as time spent on them will vary. At a minimum, these activities will provide an additional 20 hours of nutrition education exposure (*4 hours for Book Club + 6 hours for Student Workbook Activities + 10 hours for Classroom Celebrations*).

What is the theoretical basis of Discover MyPlate? Social Cognitive Theory (SCT) is a behavior-change model which emphasizes that learning occurs in a social context, and that much of what is learned is gained through observation. SCT is based on the view that behavioral, environmental, and personal/cognitive factors influence one another in a reciprocal fashion. In other words, if there are changes in environmental or personal/cognitive factors, behavior change is promoted. This makes it particularly relevant to, and effective when used with, health education.

SCT is based on the following key beliefs:

- 1. People can learn through observation or modeling.** *For example:* observing a teacher/peer/parent modeling healthy behaviors, skills, cognitive processes; observing positive outcomes or reactions of others; observing or receiving positive reinforcement from others.
- 2. People have an ability to influence their own behavior and the environment.** *For example:* motivation can happen through intrinsic reinforcement (i.e. pride, satisfaction, a sense of accomplishment). People can also influence their outcomes and environment through self-reflection and self-regulation.
- 3. Learning can happen without an immediate change in behavior** *For example:* a person may have learned a behavior successfully through observation, but may not yet be motivated to demonstrate this new behavior. Learning also involves gaining and practicing new knowledge, cognitive skills, concepts, values, rules, etc.



SCT CONCEPTS	Classroom example/DMP Component
Observational Learning	Observing teacher/peers/parents/book characters tasting and enjoying healthy foods and being physically active; food preparation activities; parent-child activities at home
Outcome Expectations	Knowledge and attitudes about new foods, eating breakfast, and physical activity are positively changed through fun activities, tasting experiences, and use of motivational characters.
Self-efficacy	Tasting and food preparation activities; seed-growing activity; role-playing; practicing and demonstrating skills in classroom activities and cafeteria connections; recognizing patterns of progress and success
Self-regulation/control	Goal-setting activities (e.g., trying fruits and vegetables of each color); self-monitoring activities (e.g., breakfast tracker); self-reflection (at the end of each lesson)
Environment	Healthy classroom displays and practices; completion of family activities on handouts and reading emergent readers at home; healthy celebrations; and incorporation of Discover MyPlate materials in school library, physical education, art, and music
Reinforcements	Positive encouragement and reinforcements from teachers/parents/peers/school administrators/school nutrition services; Discover MyPlate certificate; STAR chart ; stickers, badges, and other incentives for trying new foods, eating breakfast, making a MyPlate meal
Behavioral Capabilities	Classroom lessons, at-home activities, cafeteria connections, and student worksheets

8. Suggested Post-Training Activities

Encourage participants to do the following activities independently after the training session has concluded.



Reflection Activity

After 6 months or a year, retake the the **Health Self-Assessment** and see what changes you've made during the school year. Reflect on the changes in your journal.



Exploration Activity



Visit and explore <http://www.choosemyplate.gov>



Tracking Activity



Track and analyze what you eat for 1 week using the Supertracker tool at: <http://www.choosemyplate.gov/supertracker-tools/supertracker.html>.

Action Activity

Take action to support and enhance your school district's **Local School Wellness Policy** and see how your activities and projects fit in with the overall culture of wellness at your school. In addition to district wellness policies, some schools have developed their own individual wellness guidelines. Teachers, parents, community members, and others may get involved at the district level, school level, or both.

- Find and read your school district's **Local School Wellness Policy** and any guidelines that exist for your school. Look for this information on the district or school Web site, in a school policies handbook, in a parent or family handbook, or in the school office.
- Take a look at the policy language. Wellness policies typically vary in comprehensiveness (i.e. topics addressed) and strength (definitive requirements). Does the policy language “suggest,” “encourage,” “recommend,” or say “Schools can...” or “Schools may...”? Or is the policy language stronger: “require,” “Schools will...,” or “Schools must”?
- Ask questions. *When was this wellness policy developed? Is it in the process of being updated? Who wrote the policy? Who is responsible for its implementation? Has the policy ever been assessed or evaluated for compliance? Are teachers and parents aware of the policy? Are the policy goals included in the School Improvement Plan?*
- Identify your role in helping to implement and communicate the policy. Think about the parts of the policy that apply most to you. Use the policy or school guidelines to support the activities, projects, and curricula you want to implement. Talk about the wellness policy goals that your activities/projects will help to meet when you are sharing updates or looking for support.
- Join or form a Wellness Team or Health Advisory Council of interested teachers, staff members, school nutrition (i.e., school food service) personnel, parents, and students. Update the wellness policies, plan action items throughout the school year, and share updates with the school community and the public. Get buy-in from the school principal, superintendent, and other key players. Integrate your wellness policy into your school accountability system and School Improvement Plan.
- Share your stories and generate excitement. What wellness-related activities or projects have you implemented in class? Talk about the discoveries and experiences your students have had with the **Discover MyPlate** curriculum. Share stories and photographs with parents, families, and the school. Which wellness policy goals are you meeting with your classroom activities and lessons? Talk to your school's nutrition services programs, as well as health services and physical education department — strengthen those connections, show your enthusiasm for school wellness, and invite them to your classroom to share their healthy tips and expertise.

Appendix

 **REPRODUCIBLE HANDOUTS: Make copies of each for participants**

<i>Health Self-Assessment</i> (template, customize if desired).....	A1
<i>The Five Food Groups</i>	B1
<i>Discover MyPlate in a Year</i>	C1

Health Self-Assessment (template)

What are you currently doing to help children make healthy food choices and be physically active? Is there more you can do? What personal nutrition and physical activity goals do you have? Use this self-assessment to help you identify goals for the upcoming year. Revisit this tool at the end of the year to reflect on your progress. Begin by asking yourself: What does being healthy mean to me? What are some ways I try to be a healthy role model? What nutrition and physical activity goals can I accomplish this year?

NUTRITION EDUCATION

1) Do you incorporate nutrition education or a school garden into your Kindergarten curriculum?

Yes No

If yes, how many days per school year do you teach nutrition education? _____

If no, why not? _____

2) How comfortable do you feel teaching nutrition? 1 2 3 4 5

(1 being not at all comfortable, 5 being very comfortable)

What would make you feel more confident in teaching kindergartners about nutrition?

3) Do you conduct any food preparation activities with students in the classroom? Yes No

What kinds? _____

If no, why not? _____

SCHOOL WELLNESS

4) Have you read your school's and/or school district's local wellness policy? Yes No

5) Have you met with the school district's nutrition director (food service director) or school nurse to talk about how to promote healthy food choices at school? Yes No

6) Do you participate in any school or staff wellness activities? Yes No



IN THE CLASSROOM

7) Do you display decorations or signs that serve as healthy reminders for students? Yes No

8) Do you display visuals that show physical activity? Yes No

9) Do you use only non-food rewards in your classroom? Yes No

10) Do you encourage your students to be physically active in class/at home? Yes No

In what ways? _____

11) Do you encourage students to choose fruits and vegetables at lunch? Yes No

12) Do you offer fruits and vegetables at class parties and celebrations? Yes No

PERSONAL HEALTH

13) Do you participate in your school's staff wellness program (if available)? Yes No

14) How many hours per week are you physically active? _____

What types of physical activities do you do? _____

15) At meals, do you fill half your plate with fruits and vegetables? Yes No

16) Do you consider yourself "healthy"? Yes No

17) Do you eat breakfast daily? Yes No

18) What foods do you eat as snacks? _____

19) Do your students/colleagues see you eating and drinking nutritious foods and beverages?

Yes No

20) How often do you drink sugar-sweetened beverages such as soft drinks, fruit drinks, sweetened coffee or tea, or lemonade?

Rarely Sometimes Every Day

The Five Food Groups

The following is an at-a-glance chart of foods that belong to each food group. It is not a complete list. For more information on each food group, visit: <http://www.choosemyplate.gov/food-groups/>

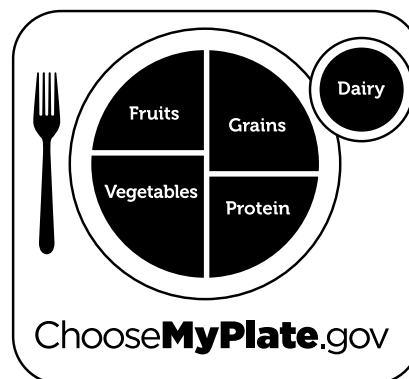
FOOD GROUP	FOODS IN THE FOOD GROUP	
FRUITS Any fruit or 100% fruit juice counts as part of the Fruit Group. Fruits may be fresh, canned, frozen, or dried; and may be whole, cut-up, or puréed.	Apples Apricots Bananas Cherries Grapefruit Grapes Kiwi fruit Mangoes Oranges Papaya Peaches Pears Pineapple Plums Raisins	BERRIES Blackberries Blueberries Raspberries Strawberries MELONS Cantaloupe Honeydew Watermelon
VEGETABLES Any vegetable or 100% vegetable juice counts as a member of the Vegetable Group. Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed. There are five Vegetable Subgroups: Beans and Peas, Dark Green, Red and Orange, Starchy, and Other Vegetables.	BEANS AND PEAS Black beans Black-eyed peas Chickpeas (garbanzo beans) Lentils Red beans Soy beans Split peas White beans DARK-GREEN VEGETABLES Bok choy Broccoli Collard greens Dark-green leaf lettuce Kale Romaine lettuce Spinach RED AND ORANGE VEGETABLES Butternut squash Carrots Red/orange bell peppers Pumpkin Sweet potatoes Tomatoes	STARCHY VEGETABLES Corn Green peas Plantains Potatoes Taro OTHER VEGETABLES Asparagus Avocado Beets Cauliflower Celery Cucumber Eggplant Green beans Iceberg lettuce Mushrooms Radicchio Sugar snap peas Yellow bell pepper Zucchini

The Five Food Groups (continued)

FOOD GROUP	FOODS IN THE FOOD GROUP	
<p>GRAINS</p> <p>Any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products. Grains are divided into two subgroups:</p> <ul style="list-style-type: none"> • Whole Grains contain the entire grain kernel — the bran, germ, and endosperm. • Refined Grains have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron, and many B vitamins. 	<p>WHOLE GRAINS</p> <p>Amaranth</p> <p>Bread products made primarily from 100% whole grains (such as whole-wheat breads, buns, rolls, and pitas)</p> <p>Brown rice</p> <p>Buckwheat</p> <p>Bulgur</p> <p>Millet</p> <p>Muesli</p> <p>Oatmeal</p> <p>Popcorn</p> <p>Quinoa</p> <p>Rolled oats</p> <p>Whole-grain barley</p> <p>Whole rye</p> <p>Whole-wheat crackers</p> <p>Whole-wheat pasta</p> <p>Whole-wheat tortilla</p> <p>Wild rice</p>	<p>REFINED GRAINS*</p> <p>Bread products made with refined “white” flour (such as white rolls, buns, pitas, etc.)</p> <p>Cornbread</p> <p>Corn tortillas</p> <p>Couscous</p> <p>Flour tortillas</p> <p>Grits</p> <p>Noodles</p> <p>Pastas (spaghetti, macaroni)</p> <p>Pretzels</p> <p>Some ready-to-eat breakfast cereals</p> <p>White rice</p> <p><small>* Most of these products are made from refined grains. Some are made from whole grains. Check the ingredients list for the words “whole grain” or “whole wheat” to decide if they are made from a whole grain. Some foods are made from a mixture of whole and refined grains.</small></p>
<p>DAIRY</p> <p>All fluid milk products and many foods made from milk are considered part of this food group. Most Dairy Group choices should be fat-free or low-fat. Foods made from milk that retain their calcium content are part of the group.</p> <p>Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not considered to be in the Dairy Group. Calcium-fortified soymilk (soy beverage) is also part of the Dairy Group.</p>	<p>Fluid milks (flavored or unflavored)</p> <p>Lactose-reduced milks</p> <p>Lactose-free milks</p> <p>Calcium-fortified soy beverages (soymilk)</p> <p>CHEESE</p> <p>Cheddar</p> <p>Mozzarella</p> <p>American</p> <p>Cottage cheese</p>	<p>Yogurts</p> <p>MILK-BASED DESSERTS</p> <p>Puddings</p> <p>Ice cream</p> <p>Frozen yogurt</p> <p>Ice milks</p>

The Five Food Groups (continued)

FOOD GROUP	FOODS IN THE FOOD GROUP	
<p>PROTEIN FOODS</p> <p>All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds are considered part of the Protein Foods Group.</p> <p>Beans and peas are also part of the Vegetable Group.</p>	<p>BEANS AND PEAS</p> <p>Black beans Black-eyed peas Chickpeas (garbanzo beans) Lentils Red beans Soy beans Split peas White beans</p> <p>SEAFOOD</p> <p>Anchovies Catfish Clams Cod Crab Crawfish Flounder Lobster Oysters Salmon Sardines Shrimp Squid (Calamari) Tilapia Tuna</p> <p>NUTS AND SEEDS (AND BUTTERS)</p> <p>Almonds Peanuts Pumpkin seeds Sunflower seeds Walnuts</p>	<p>PROCESSED SOY PRODUCTS</p> <p>Tofu Tempeh Texturized Vegetable Protein (TVP) “Veggie Burgers”</p> <p>POULTRY</p> <p>Chicken Duck Turkey</p> <p>EGGS</p> <p>MEATS (LEAN CUTS AND GROUND MEATS)</p> <p>Beef Ham Lamb Pork Veal</p>



Discover *MyPlate* in a Year

There are many ways you can schedule the teaching of **Discover *MyPlate*** curriculum components throughout the school year. The six lessons can be taught as a 6-week unit. It can also be spread out over the year. Below is a sample schedule to show how you can integrate the curriculum into your planning to keep nutrition education in front of students all year long. Note that the **Book Club**, **Cafeteria Connections**, **Dramatic Play Activities**, and **Extra Helpings** in each lesson can be used throughout the year.

MONTH	DISCOVER MYPLATE COMPONENT
AUGUST/SEPTEMBER	<ul style="list-style-type: none"> • Lesson 1: Meet the Five Food Group Friends • Back-to-School Friendship Celebration • Friendship Pocket Look and Cook Activity
OCTOBER	<ul style="list-style-type: none"> • Lesson 2: Discover <i>MyPlate</i> • Halloween & Fall Harvest Celebration <p style="text-align: center;">School Lunch Week</p>
NOVEMBER	<ul style="list-style-type: none"> • Lesson 3: Eat Your Colors! • Crunchy Rainbow Wrap Look and Cook Activity • Thanksgiving Celebration
DECEMBER	<ul style="list-style-type: none"> • Welcome Winter! Celebration • Lesson 1-2 Extra Helpings
JANUARY	<ul style="list-style-type: none"> • Lesson 3 Extra Helpings
FEBRUARY	<ul style="list-style-type: none"> • Lesson 4: Planting the Seeds for Healthier Eating • Valentine's Day Celebration
MARCH	<ul style="list-style-type: none"> • Lesson 5: Starting Our Day With <i>MyPlate</i> • Fruit-a-licious Breakfast Cup Look and Cook Activity • St. Patrick's Day Celebration & Dr. Seuss' Birthday • 100th Day of School Celebration <p style="text-align: center;">School Breakfast Week</p>
APRIL	<ul style="list-style-type: none"> • Swing into Spring Celebration • Earth Day Celebration (April 22) • Lesson 4 Extra Helpings • Celebrate School Library Month with Book Club selections from Lessons 1-4 <p style="text-align: center;">School Library Month</p>
MAY	<ul style="list-style-type: none"> • Lesson 6: Lets Play, Lets Party! • Food Group Friend Look and Cook Activity • Lesson 5 Extra Helpings
JUNE	<ul style="list-style-type: none"> • End of School Year Celebration • Lesson 6 Extra Helpings • Dramatic Play Activities

Acknowledgments

The U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) would like to thank the following schools and individuals for their contributions and expertise in the development of this publication.

USDA Project Managers/Members

Project Officer:

Alicia H. White, MS, RD

Child Nutrition Division, USDA FNS

Project Team:

Jan Barrett, MS, MBA, RD

Heidi Bishop, BS

Barbara Jirka, PhD, SNS

Erika Pijai, MS, RD

Child Nutrition Division, USDA FNS

Reviewers:

Nora L. Howley, MA

National Education Association

Diane Duncan-Goldsmith, MS, RD, LD

School Nutrition Services Dietetic Practice Group
of the Academy of Nutrition and Dietetics

Steven Hicks, MA

Department of Education

Deanna Hildebrand, PhD, RD, SNS, LD

Oklahoma State University

Marion Hinnners, MS

USDA FNS Office of Food Safety

Christi Kay, MEd

HealthMPowers, Inc.

Caitlin Merlo, MPH, RD

Centers for Disease Control and Prevention

Heather Parker, MS, CHES

National PTA

Karen Weber Cullen, DrPH, RD

USDA/Agricultural Research Service Children's Nutrition
Research Center, Baylor College of Medicine

Formative Research Schools:

Cherokee Point Elementary School, San Diego, CA

Powers Ferry Elementary School, Atlanta, GA

Windham Primary School, Windham, ME

Pilot Study Schools:

Storm Lake Elementary School, Storm Lake, IA

John C. Clark, Jr. Elementary School, Hartford, CT

**This curriculum was created through
a contract with CarrotNewYork.**

CarrotNewYork Teacher Advisors:

Kimberly Clark

Tracy Ferrell

Megan Havens

Mara Pauker

Stephanie Roberts



